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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,509	10/29/2001	Scott Hunt	56442 (71710)	5412

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JOHN W. RYAN
C/O DECHERT LLP
PRINCETON PIKE CORPORATION CENTER
P.O. BOX 5218
PRINCETON, NJ 08543-5218

EXAMINER

O CONNOR, CARY E

ART UNIT	PAPER NUMBER
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3732

18

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/008,509

Applicant(s)

HUNT ET AL

Examiner

Cary E. O'Connor

Art Unit

3732

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-16 and 18-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 9, 10, 14, 16, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherts et al (5,947,866) in view of Gannoe et al (2002/0077532). Sherts shows a segmented arm support apparatus 500 for attachment to a surgical retractor comprising an articulating arm 504 having a plurality of segments 518, all having the same size and shape. Each segment has a convex outer wall 520 in mating relationship to a concave inner surface 524 of an adjacent segment. A cable 516 extends through a passage 526 formed in each segment. A manual device 506 for tightening the cable is provided for causing the mating segments to be brought into tight frictional engagement. A tissue stabilization device 502 is removably attached to the arm and is lockable upon tightening of the cable. Sherts does not disclose that the segments are formed of a high stiffness material coated with a high friction plating material. Gannoe shows a segmented arm support apparatus wherein the segments are made of a high stiffness material coated with a high friction coating 222 (para. 0091) to reduce the tension in the cable required to lock the arm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the segments of Sherts of a high stiffness material coated with a high friction coating, as

taught by Gannoe, in order to reduce the amount of tension required in the cable to lock the arm in position. As to claim 16, the method for stabilizing is inherently carried out during the use of the device of Sherts as modified by Gannoe.

Claims 1-3, 5, 9-16, 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gannoe et al (2002/0077532) in view of Sherts et al (5,947,866). Gannoe shows a segmented arm support apparatus for attachment to a surgical retractor 22 comprising an articulating arm 204 having a plurality of segments 206, each segment having an convex outer wall 220 in mating relationship to a concave inner surface 218 of an adjacent segment. Each segment is formed of a material with high stiffness coated with a high friction plating material 222 (see also paragraph 0091). A cable 208 extends through a passage formed in each segment. A device 205 for tightening the cable is provided for causing the mating segments to be brought into tight frictional engagement. A tissue stabilization device 202 is removably attached to the arm and is lockable upon tightening of the cable. Gannoe does not show the segments being all the same size and shape. Sherts shows a segmented arm support apparatus having segments of the same size and shape. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make all of the segments of Gannoe the same size and shape, as taught by Sherts, in order to cut production costs by only requiring a single mold or process to produce all of the segments. As to claims 11-13 and 20-22, the stabilization device is removably attached to the arm by a movable socket 248 slidable along a plunger 266 attached to the end of the cable and wherein the socket is biased against the plunger by a spring 270. As to claims 14, 15,

23 and 24, the arm may be attached to the retractor by a mounting block 72 including a lever 106 for positioning a cam 108. As to claim 16, the method for stabilizing is inherently carried out during the use of the device.

Claims 5-8, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gannoe et al (2002/0077532) in view of Sherts et al (5,947,866) as applied to claims 1 and 16 above, and further in view of Leyden et al (6,371,345). While Gannoe discusses using a plating material have a different hardness than the material of the segments (paragraph 0091), he does not specify if the plating material is necessarily softer than the material forming the segments. Leyden utilizes a compressible coating on a ball member to increase frictional resistance between the mating surfaces. The coating reduces the force required to that must be applied to arrest relative movement between the mating surfaces (see column 3, lines 18-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a coating on the segments of Gannoe, as modified by Sherts, that is softer than the segment material, in view of Leyden, so that less force would be required to arrest relative motion of the segments. As to claims 7, 8, 18 and 19, Leyden discloses the use of an elastomer material for the friction increasing coating. Without a showing of criticality, the use of the other claimed materials as a coating material would have been obvious to one of ordinary skill in the art, dependent on the material of the segments and the desired tightening force.

Applicant's arguments with respect to claim 1 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed February 24, 2004 have been fully considered but they are not persuasive. In response to applicant's argument that Leyden is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Leyden is pertinent to problem of creating friction in a ball and socket connection which is the particular problem addressed by both applicant and Gannoe.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Santilli shows a segmented arm support wherein the segments all have the same size and shape.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 703-308-2701. The examiner can normally be reached on M-F 7:00am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on 703-308-2582. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.


Cary E. O'Connor
Primary Examiner
Art Unit 3732

ceo
April 9, 2004